## **Storm Data and Unusual Weather Phenomena**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perso Killed		Estimated Damage Property Crops	November 1998
INDIANA, Northeast								
Pulaski County Countywide	10 NUME	<b>0845EST</b> EROUS TREES A	AND POWER	LINES BLO	0 OWN DOWN	0 N ACROS	<b>10K</b> SS THE COUNTY.	Thunderstorm Wind
Starke County Knox	10	<b>0845EST</b> RAL TREES AN			0	0	0	Thunderstorm Wind
La Porte County Countywide		FELL INTO IT						<b>Thunderstorm Wind</b> IVE DAM AGE WHEN A LARGE AVILY DAMAGED BY A FALLEN
Marshall County Countywide		<b>0930EST</b> RAL POWER LI SS THE COUN		LES WERE	<b>0</b> BLOWN D	<b>0</b> OWN AL	<b>25K</b> ONG WITH M ANY	<b>Thunderstorm Wind</b> Y LARGE TREES AND LIM BS
White County Monticello	10 WIDE	<b>0935EST</b> SPREAD DAMA	AGE OCCURI	RED TO TRI	0 EESPOWE	0 ER LINES	<b>30K</b> 5SIGNS AND POW	Thunderstorm Wind WER POLES ACROSS THE TOWN.
Cass County Logansport		<b>0940EST</b> TREESPOW KED FOR A TIN		ND POLES W	<b>0</b> VERE BLOV	<b>0</b> WN DOW	<b>25K</b> Yn in town with	Thunderstorm Wind SEVERAL RESIDENTIAL STREETS
St. Joseph County Countywide	10 WIDE	<b>0945EST</b> SPREAD DAM <i>!</i>	AGE TO TREI	ES AND POV	0 WER LINES	0 S WERE I	<b>50K</b> REPORTED ACROS	Thunderstorm Wind
Elkhart County Goshen Arpt	10	1040EST			0	0		Thunderstorm Wind (G53)
Elkhart County Countywide		<b>1045EST</b> EROUS TREES E TREE TOPPL			<b>0</b> RE BLOWN	0 N DOWN	<b>50K</b> . ONE M OBILE HO	Thunderstorm Wind DM E WAS CRUSHED WHEN A
Kosciusko County 2 N North Webster	10	1046EST			0	0		Thunderstorm Wind (G52)
Elkhart County Nappanee		<b>1050EST</b> IAN WHILE DI HIS CAR. THE						Thunderstorm Wind HEN A LARGE TREE LIMB FELL
Miami County Countywide	10 SEVE	<b>1100EST</b> RAL LARGE TR	EES AND PC	OWER LINES	0 S WERE BL	0 OWN DO	<b>10K</b> DWN.	Thunderstorm Wind
Noble County Countywide	10 SEVE	<b>1110EST</b> RAL TREES AN	D POWER LI	NES WERE	0 REPORTEI	0 D BLOW	<b>10K</b> N DOWN.	Thunderstorm Wind
Whitley County Countywide	10 SEVE	<b>1115EST</b> RAL TREES AN	D POWER LI	NES WERE	0 BLOWN D	<b>0</b> OWN AC	<b>10K</b> CROSS THE COUNT	Thunderstorm Wind
Huntington County Rock Creek	<b>10</b> THE R	<b>1125EST</b> OOF WAS BLC	WN OFF TH	E OLD ROC	0 K CREEK T	<b>0</b> TOWNSH	0 IP HIGH SCHOOL.	Thunderstorm Wind

## Storm Data and Unusual Weather Phenomena

November 1998 Time Local/ Path Length Path Width Number of Estimated Damage Persons **INDIANA**, Northeast **Grant County** Marion 10 1130EST 0 50K **Thunderstorm Wind** SEVERAL TREES AND POWER LINES WERE BLOWN DOWN IN TOWN. ONE CAR WAS BADLY DAMAGED BY A LARGE TREE LIMB. ONE FARM OUTSIDE OF TOWN HAD A ROOF BLOWN OFF THE BARN. Lagrange County Lagrange 10 1135EST 0 Thunderstorm Wind LAKELAND HIGH SCHOOL HAD ONE AUDITORIUM WALL BLOWN IN BY THE STRONG WINDS. **Allen County** Ft Wayne 10 1145EST 0 1 150K Thunderstorm Wind NUMEROUS TREES AND POWER LINES WERE BLOWN DOWN IN TOWN. ONE WOMAN WAS SERIOUSLY INJURED WHEN SHE CRASHED INTO A LARGE TREE THAT HAD FALLEN ACROSS STATE HIGHWAY 33. A MOBILE HOME WAS DESTROYED BY FIRE WHEN DOWN POWER LINES IGNITED THE HOME. **Steuben County** 0 Countywide 10 1145EST 30K Thunderstorm Wind SEVERAL TREES AND POWER LINES WERE BLOWN DOWN. ONE HOM E OWNERS GARAGE SUFFERED EXTENSIVE DAMAGE WHEN A LARGE TREE WAS TOPPLED ONTO IT. Wells County Countywide 10 1145EST 25K Thunderstorm Wind NUMEROUS TREES...POWER LINES AND POWER POLES WERE BLOWN DOWN ACROSS THE COUNTY. **Adams County** Decatur 10 10K Thunderstorm Wind MANY TREES AND POWER LINES WERE DOWN ACROSS THE TOWN. **Jay County** 1240EST **Portland** 10 0 0 10K Thunderstorm Wind SEVERAL TREES AND POWER LINES WERE DOWN ACROSS THE TOWN. MICHIGAN, Extreme Southwest **Berrien County** 10 0930EST Niles 25K Thunderstorm Wind SEVERAL TREES...TREE LIMBS...POWER LINES AND POWER POLES WERE EITHER SNAPPED OR BLOWN DOWN IN TOWN. **Cass County** Countywide 10 0940EST 0 50K Thunderstorm Wind EXTENSIVE DAMAGE OCCURRED TO TREES...POWER LINES AND POLES ACROSS THE COUNTY. St. Joseph County 0955EST 0 Countywide 10 0 75K Thunderstorm Wind NUMEROUS TREES AND POWER LINES WERE BLOWN DOWN ACROSS THE COUNTY. THE TOWN OF STURGIS WAS ESPECIALLY HARD HIT WHERE TREES...LIMBS...FENCES AND TV ANTENNAS WERE BLOWN DOWN. ONE HOME OWNERS CAR WAS COMPLETELY CRUSHED BY A VERY LARGE TREE. St. Joseph County Colon 150K Thunderstorm Wind SEVERAL HOMES WERE HEAVILY DAMAGED BY FALLEN TREES. **Hillsdale County** Countywide 60K Thunderstorm Wind WIDESPREAD TREES AND POWER LINES WERE BLOWN DOWN. AEP HAD 66 REPORTS OF POWER LINES DOWN ACROSS THE COUNTY. IN JONESVILLE... DAMAGE WAS EXTENSIVE TO TREES...SIGNS AND POWER LINES.

## **Storm Data and Unusual Weather Phenomena**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed		Estimated Damage Property Cre	November 1998  Character of Storm
OHIO, Northwest								
Paulding County Countywide	10 SEVE	<b>1215EST</b> RAL TREES WER	E REPORTI	ED BLOWN	0 DOWN AC	0 CROSS TI	<b>10K</b> HE COUNTY.	Thunderstorm Wind
Defiance County Defiance	10 SEVER TREE		POWER LI	NES WERE	<b>0</b> BLOWN D	<b>0</b> OWN. O	25K NE CAR WAS	<b>Thunderstorm Wind</b> HEAVILY DAM AGED BY A LARGE
Van Wert County Countywide	10 SEVE	<b>1245EST</b> RAL TREES WER	E BLOWN I	DOWN.	0	0	10K	Thunderstorm Wind
Fulton County Delta		1300EST RAL TREES WER ALSO REPORTE			<b>0</b> TH SOM E R	<b>0</b> ROADS R	<b>10K</b> EPORTED BLO	Thunderstorm Wind OCKED. SEVERAL POWER POLES
Henry County Napoleon	<b>10</b> A FEW	<b>1310EST</b> / TREES WERE B	LOWN DO	WN IN TOW	<b>0</b> VN.	0	0	Thunderstorm Wind
Putnam County Columbus Grove	10	1310EST			0	0		Thunderstorm Wind (G61)
Putnam County Columbus Grove		<b>1310EST</b> RAL TREES AND TIONS DUE TO F			<b>0</b> BLOWN D	0 OOWN. S	10K TATE ROUTE	<b>Thunderstorm Wind</b> 65 WAS BLOCKED IN SEVERAL
Allen County 4 W Lima to Lima		1330EST POWER POLES W SNAPPED AS W		PED. ONE I	<b>0</b> LARGE TR	<b>0</b> EE WAS	<b>10K</b> BLOWN DOW	Thunderstorm Wind  N. TWO RAILROAD CROSSING ARMS

One of the strongest low pressure systems ever observed across the central U.S. developed across southeast Colorado on November 9th. The low deepened throughout the day on the 9th and 10th as it tracked northeastward into southeast Minnesota. Low pressure records were set across Iowa and M innesota with the lowest observed pressure of 961 millibars at Rochester M innesota the afternoon of the 10th.

During the early morning hours of the 10th, gulf moisture rapidly streamed northward into the midwest ahead of a strong cold front extending south from the surface low in northeast Iowa. Dewpoints rose into the lower 60s with temperatures in the middle to upper 60s from central Indiana into southern Michigan by mid morning. Although instability was marginal, the existence of a 70 knot low level jet combined with a mid level jet in excess of 100 knots and its associated dry air intrusion helped to enhance the wind damage potential within the squall line that developed along the cold front during the early morning hours of the 10th. This squall line quickly developed as it moved eastward across Michigan, Indiana, Illinois, Missouri and Ohio during the day of the 10th with widespread wind damage reported.